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SECRETARY OF THE AIR FORCE**

AIR FORCE POLICY DIRECTIVE 21-2

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Maintenance

MUNITIONS

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This directive implements Department of Defense Directive (DoDD) 5160.65, *Single Manager for Conventional Ammunition (SMCA)*, Department of Defense Instruction (DoDI) 5160.68, *Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and United States Special Operations Command (USSOCOM)*, and DoDI 4540.05, *DoD Transportation of U.S. Nuclear Weapons*, establishing Air Force policy for accountability, transportation and maintenance of Air Force munitions. This Publication applies to all Regular Air Force, the Air National Guard, the Air Force Reserve, Department of the Air Force civilian personnel, and contractors tasked with the responsibility to operate, maintain, control, secure, inspect, manage, load, and account for munitions and associated munitions' support equipment. This publication may not be supplemented. Ensure all records created as a result of processes prescribed in this publication are maintained in accordance with Air Force Instruction (AFI) 33-322, *Records Management and Information Governance Program*, and disposed of in accordance with the Air Force Records Disposition Schedule located in Air Force Records Information Management System. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 through the appropriate functional chain of command.

SUMMARY OF CHANGES

This document has been substantially revised and must be completely reviewed. Changes include, but are not limited to: clarification of purpose, addition of munitions loading functions,

Air Force Maintenance of Munitions Materiel, Munitions Design Characteristics and Attributes, and updated reference listing.

1. Overview. This publication establishes policy and assigns responsibilities for the accountability, maintenance, and loading of munitions to meet operational needs, including mobilization, surge, and aircraft arming requirements. This includes conventional and nuclear munitions, nuclear weapons related materials, cruise missiles, intercontinental ballistic missiles, space launch weapon systems, and associated items.

2. Policy. The overarching objective is to maintain and load munitions, missiles, and space assets in a safe, secure, serviceable, and ready condition to meet mission needs and to ensure their full inventory accountability. As such, the Air Force shall:

2.1. Support readiness objectives by maintaining equipment in optimum condition.

2.1.1. Perform accountability and maintenance at the lowest level to optimize readiness and resources.

2.1.2. Standardize organizations, tools, equipment, and skills where possible.

2.2. Assign skilled personnel necessary to support mission requirements.

2.3. Manage systems' health to ensure long-term capability of munitions equipment.

2.4. Leverage automated technology to provide information systems capable of accurate near real-time inventory accountability, operational management, total asset visibility, and positive inventory control. Systems shall be used to provide accountability of munitions from the point of entry into the Air Force stockpile until they are expended, de-militarized, transferred to an authorized disposal activity, transferred via foreign military sales, or inter-Service released. Automated technology shall provide near real-time load crew certification status to ensure operational requirements are met.

2.5. Ensure explosive-sited/approved facilities and areas are set aside exclusively for the storage, maintenance, inspection, research and development, loading of munitions, and repair of munitions and weapon systems.

2.6. Position munitions in operational theaters, standard air munitions packages, force provider locations, on afloat pre-positioned fleet ships, and in the continental United States (CONUS) to meet operational requirements, to include homeland defense requirements.

2.7. Transport Air Force nuclear weapons and conventional munitions by the most secure means and over the safest routes practicable.

3. Air Force Maintenance of Munitions Materiel. Munitions maintenance provides safe, secure, and reliable munitions to meet mission requirements with the minimal logistics footprint and maintenance burden.

3.1. Organizational-Level Munitions Maintenance. Provides the capability to launch and recover sorties as well as to maintain and repair materiel coded for organizational-level munitions maintenance. Typical activities include the storage, inspection, delivery assembly, disassembly, maintenance, handling, built-in-testing, and approved repairs of munitions to support operational requirements on the assigned stockpile.

3.2. Intermediate-level Munitions Maintenance. Provides the capability to maintain materiel coded for intermediate-level munitions maintenance in back shops. Typical activities include repair or replacement of munitions components, troubleshooting malfunctions, circuitry fault analysis, Time Compliance Technical Orders, and programming/re-programming actions. The level of effort associated with Intermediate-level Maintenance will be thoroughly analyzed and captured within various manpower, facility, training, and equipment requirement definition processes prior to being authorized for performance by munitions personnel.

3.3. Depot-level Munitions Maintenance. Provides the capability to maintain materiel coded for organizational, intermediate, and depot levels of munitions maintenance. Includes maintenance requiring the overhaul, upgrading, or rebuilding of parts, assemblies, or subassemblies, and the testing and reclamation of equipment as necessary.

3.4. Perform maintenance at the lowest organizational levels consistent with available technical manuals, personnel, capacity, infrastructure, equipment, and tools.

3.5. Resource maintenance activities at all levels to optimize weapon system readiness and meet mission requirements.

4. Munitions Design Characteristics and Attributes.

4.1. Field Air-to-Air and Air-to-Ground munitions as all-up-round (AUR) weapons systems. AUR weapons systems optimize maintenance and should be the default preference for new conventional munitions systems introduced into the Air Force inventory. Conventional munitions designs should minimize technical complexity in supportability, maintainability, and configuration management, while facilitating rapid assembly and disassembly of components. Munitions personnel are not trained/qualified or resourced to load Global Positioning System coordinates, target or mission data, or conduct electrical function testing (measurement or stimulus) by energizing any components within the munitions explosives train of weapons systems. Testing should be limited to go/no-go standard by built-in-testing through the container. Perform weapons system testing of the aircraft and release components prior to arming the aircraft.

4.2. Data collection and analysis is essential for the reliability, maintainability, and availability of weapons systems. Data collection methods enable the continuous assessment of fielded system technical health against documented performance requirements and effectiveness, suitability, and risk measures. Data collection methods should be as autonomous as possible, be compatible and incorporated with existing serviceability and monitoring procedures, and be comprehensive enough to support operational safety, suitability, and effectiveness requirements ensuring adherence to information assurance.

5. Roles and Responsibilities.

5.1. Deputy Chief of Staff for Logistics, Engineering & Force Protection (AF/A4). Develops and issues AF policy for the management of all munitions systems. Responsible for resource allocation, advocacy to sustain munitions operations, and Career Field Manager duties related to education and training.

5.2. Air Force Chief of Safety (AF/SE) and Commander, Air Force Safety Center (AFSEC/CC). Provides capabilities to identify, assess, and mitigate strategic, operational, and tactical risks to the safe accomplishment of the conventional and nuclear missions.

5.3. Major Command Commander (MAJCOM/CC). Provides manpower, resources, and training consistent with their assigned mission to optimize readiness and ensure inventory accountability of all munitions and munitions support equipment under their control.

5.3.1. Prepare funding plans and budgets for out-year munitions support requirements, weapon system modifications, and service life extension programs, including infrastructure, manpower, and support equipment.

5.3.2. Air Force Materiel Command Commander (AFMC/CC). Provides responsive support for logistics, engineering and research, development, test and evaluation, technical sustainment, product assurance, and life-cycle sustainment to support all MAJCOMs. Ensure munitions operational safety, suitability, and effectiveness.

5.3.3. Air Force Global Strike Command Commander (AFGSC/CC). Develops policies and procedures for scheduling and coordinating nuclear weapons and cargo shipments. Considers factors detailed in DoDI 4540.05 when determining whether to use military airlift or ground transportation by Department of Energy safeguard transports for CONUS nuclear weapons movements.

5.3.4. Air Education and Training Command Commander (AETC/CC). Responsible for developing course materials in coordination with Career Field Managers and providing training to individual technicians and leaders.

BARBARA M. BARRETT
Secretary of the Air Force

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

DoDD 4151.18, *Maintenance of Military Materiel*, 31 March 2004

DoDD 5160.65, *Single Manager for Conventional Ammunition (SMCA)*, 1 August 2008

DoDI 4140.01, *DoD Supply Chain Materiel Management Policy*, 6 March 2019

DoDI 4540.05, *DoD Transportation of U.S. Nuclear Weapons*, 23 June 2011

DoDI 5160.68, *Single Manager for Conventional Ammunition (SMCA): Responsibilities of the SMCA, the Military Services, and United States Special Operations Command (USSOCOM)*, 29 December 2008

JP 1, *Doctrine for the Armed Forces of the United States*, 25 March 2013

JP 3-42, *Joint Explosive Ordnance Disposal*, 9 September 2016

CJCSI 3150.04C, *Nuclear Weapons Stockpile Logistics Management and Nuclear Weapons Reports Under the Joint Reporting Structure*, 28 October 2019

AFPD 63-1/20-1, *Integrated Life Cycle Management*, 7 August 2018

AFI 33-322, *Records Management and Information Governance Program*, 23 March 2020

Prescribed Forms

None

Adopted Forms

AF Form 847, *Recommendation for Change of Publication*, 22 September 2009

Abbreviations and Acronyms

AETC—Air Education and Training Command

AFGSC—Air Force Global Strike Command

AFMAN—Air Force Manual

AFMC—Air Force Materiel Command

AFPD—Air Force Policy Directive

AUR—All-Up-Round

CONUS—Continental United States

DoDD—Department of Defense Directive

DoDI—Department of Defense Instruction

MAJCOM—Major Command

JP—Joint Publication

Terms

Accountability—The obligation imposed by law or lawful order or regulation on an officer or other person for keeping accurate record of property, documents, or funds (as defined by *Joint Publication (JP) 1*, Doctrine for the Armed Forces of the United States). The person having this obligation may or may not have actual possession of the property, documents, or funds. Accountability is concerned primarily with records, while responsibility is concerned primarily with custody, care, and safekeeping. The degree of responsibility for property that exists when a record of property is maintained on a numbered stock record account is subject to audit. All munitions maintenance functions have an inherent responsibility to ensure that accountability is maintained.

Load Crew Certification—The independent verification of munitions loading proficiency and quality of performance that satisfies the elevated safety and reliability requirements of arming aircraft to ensure mission effectiveness.

Munition—A complete device charged with explosives, propellants, pyrotechnics, initiating composition, or chemical, biological, radiological, or nuclear material for use in operations including demolitions (as defined by *JP 3—42*, Joint Explosive Ordnance Disposal).

Readiness—The ability of military forces to fight and meet the demands of assigned missions (as defined by *JP 1*). Unit readiness is the ability to provide capabilities required by the combatant commanders to execute their assigned missions.